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Cyberbullying: Using Virtual Scenarios to Educate and Raise Awareness

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Abstract

This study examined cyberbullying in three distinct phases to facilitate a multifaceted understanding of cyberbullying. The phases included (1) a quantitative survey, (2) a qualitative focus group, and (3) development of educational scenarios/simulations (within the *Second Life* virtual environment). Phase III was based on adolescent feedback about cyberbullying from phases I and II of this study. In all three phases, adolescent reactions to cyberbullying were examined and reported to raise awareness and to educate others about cyberbullying.

Cyberbullying: Using Virtual Scenarios to Educate and Raise Awareness

Cyberbullying has gained attention and recognition in recent years (Beale & Hall, 2007; Carney, 2008; Casey-Canon, Hayward, & Gowen, 2001; Kowalski & Limber, 2007; Li, 2007; Shariff, 2005). The increased interest and awareness of cyberbullying relates to such factors as the national media attention after several publicized cyberbullying tragedies (Maag, 2007; Stelter, 2008; Zifcak, 2006), the attenuation of communication boundaries (i.e., cell phones, the Internet, and computer network connections), and the exponential increases in technology usage among youth. Nonetheless, with the escalation of technology and the easy access and popularity of technological devices among youth, presently there remains a critical gap in the literature related to cyberbullying and its possible effects on school-aged children and adolescents. Because cyberbullying has the potential to impact youth across systems (i.e., home, school, and the community), we believe that parents, "school professionals" (Li, 2007, p. 1778), and mental health providers must not only be made aware of cyberbullying and its consequences, but must also have access to ways to deal with this growing concern.

Two years ago, cyberbullying was considered to be a "new territory" for exploration (Li, 2007, p. 1778) because there was limited information about bullying through "electronic means" (Li, p. 1780). In contrast, studies on cyberbullying are becoming more prevalent (Beale & Hall, 2007; Carney, 2008; Kowalski & Limber, 2007; Li, 2007), including some descriptions of the worst cyberbullying incidences (Maag, 2007; Stelter, 2008; Zifcak, 2006). At this time, there is a need to raise awareness about the effects of cyberbullying and to create educational opportunities to serve multiple audiences (i.e., teachers, teacher educators, school administrators, school counselors, mental health professionals, students, parents) in the quest to identify and hopefully prevent cyberbullying in the future. Consequently, to facilitate a multifaceted understanding of

cyberbullying, this study sought to examine cyberbullying through three phases: (1) a quantitative survey, (2) a qualitative focus group, and (3) development of the educational scenarios/simulations (i.e., using virtual world avatars similar to those used in Linden Labs' *Second Life* [<http://secondlife.com/>]) based on adolescent feedback from phases I and II of this study. Adolescent reactions to cyberbullying in all three phases of this study were examined and reported with two aims in mind: (1) to raise awareness of cyberbullying, and (2) to educate others about cyberbullying.

Defining Cyberbullying

Cyberbullying has been described as a traumatic experience which can lead to physical, cognitive, emotional, and social consequences (Carney, 2008; Casey-Canon et al., 2001; Patchin & Hinduja, 2006). Cyberbullying has been defined as “bullying through the e-mail, instant messaging, in a chat room, on a website, or through digital messages or images sent to a cell phone” (Kowalski & Limber, 2007, p. 822). There are numerous methods to engage in cyberbullying, including: (1) email, (2) instant messaging, (3) websites, (4) online gaming, (5) listservs, (6) chat rooms/bash boards, and (7) small text messaging (SMS) (Beale & Hall, 2007; Li, 2007). In addition, there are different forms of cyberbullying when compared to traditional bullying. For example, Beale and Hall (2007), Mason (2007), and Willard (2008) found that there are at least seven different types of cyberbullying, including: (1) flaming, angry, rude, vulgar messages to person or party; (2) harassment, sending messages to a person repeatedly; (3) denigration, sending/posting rumors, harmful, untrue information person to others; (4) cyberstalking, threats of harm, highly intimidating; (5) impersonation or masquerading, pretending to be another person and posting/sending material on-line to make them look bad; (6) outing or trickery, tricking a person into sending information (secrets, embarrassing information)

that can be used to send to others online; and (7) exclusion, excluding someone purposefully from an online group (IM list).

Research has suggested that there are distinct gender and age differences with cyberbullying. According to the literature, girls are more likely to be on-line and to cyberbully (Beale & Hall, 2007; Kowalski & Limber, 2007; Li, 2006, 2007). This finding is “opposite of what happens off-line,” where boys are more likely to bully than girls (Beale & Hall, p. 8). Age also appears to be a factor in cyberbullying. Cyberbullying increases in the elementary years, peaks during the middle school years, and declines in the high school years (Beale & Hall). Cyberbullying appears to be a growing concern among middle school-aged children (Beale & Hall; Hinduja & Patchin, 2008; Kowalski & Limber, 2007; Li, 2007; Pelligrini & Bartini, 2000; Smith, Mahdavi, Carvalho, and Tippett, 2006; Williams & Guerra, 2007). Of the middle school grades, 6th Grade students are usually the least victimized (Kowalski & Limber), while 8th Grade students appear to experience the highest percentage of cyberbullying (Kowalski & Limber; Smith, et al., 2006; Williams & Guerra).

Because of its cyber presence, there are challenges posed by cyberbullying that differ from traditional bullying. Shariff (2005) noted three specific challenges of cyberbullying. They include (1) cyberbullying is anonymous, (2) there is an infinite audience, and (3) sexual harassment is often a prevalent aspect. Because of today’s access to online technologies utilized through social networking tools for collaboration, communication, and social interaction (e.g., Facebook, MySpace, chat rooms), the given challenges are likely to increase over time. With this in mind, we believe that it is important to look for pedagogical methods to raise awareness and to increase education about cyberbullying and to move toward preventative measures to deal with cyberbullying in the future. In considering how to best investigate cyberbullying, we turned to a

mixed method approach, conducted in three phases. Middle school students were selected for this study because research suggests that school-aged bullying/cyberbullying is the most intense during the middle school years (Beale & Hall, 2007; Kowalski & Limber, 2007; Pellegrini & Bartini, 2000). For the first two phases, we used traditional methods of data collection (i.e., survey, focus groups). However, for phase III, we chose a virtual world environment to develop scenarios/simulations that will be tested for their effectiveness in raising awareness of cyberbullying prevention in the future. The following describes our rationale for choosing a virtual environment.

Using Virtual Environments for Research and Education

There are now virtual environments which allow researchers to create simulations in a safe environment. Yee et al. (2007) found that “our social interactions in online virtual environments, such as *Second Life* (SL), are governed by the same social norms as social interactions in the physical world” (p. 119). In addition, Tettegah, Taylor, Whang, Meistninkas, and Chamot (2006) noted that “... simulations can be utilized across a range of different circumstances, where it might normally be impossible or very difficult methodologically to create a certain environment or situation for research purposes” (p. 2).

Second Life (SL) (<http://www.secondlife.com>), which was the virtual environment of choice for our study, is an online virtual world whereby users can create a virtual identity through the use of an avatar. An avatar is a computer generated representation of a person inside the virtual environment. The avatar can appear as the person does in the real world or it can look very different depending on the user’s imagination. Once created, the user can have a virtual life and virtual experiences through the avatar. Users have the option and opportunity to buy clothes, run businesses, purchase homes, and get married within SL. Presently, real world businesses

(e.g., IBM and Nissan) maintain a virtual presence within *Second Life*; and usually offer services similar to what they offer in the real world (e.g., product information, purchase opportunities, company information). Educational institutions of all levels, from elementary schools to institutions of higher education are building virtual homes in SL and in other online virtual communities (e.g., Active Worlds). For example, several universities offer tours, classes, and welcome visitors to their campus virtually. Others have created a SL presence for distance learners. The University of Alabama's Department of Educational Studies in Psychology, Research Methodology, and Counseling owns an island in *Second Life* and has several projects for teaching, research, and service underway. Active Worlds (<http://www.activeworlds.com/>) is another three-dimensional virtual world similar to SL. Active Worlds offers a virtual environment specifically for educators.

Researchers have been urged to consider virtual world studies now because the current transformational period will likely draw to a close, and because it will be difficult to replicate the important processes in the future (Bainbridge, 2007). Thus, an opportunity exists now for educators and researchers to study this innovative technology. In so doing, researchers will play an important role in establishing a framework for conducting academic research within a virtual world environment (in this case, *Second Life*).

As previously mentioned, this study included three phases (i.e., a survey, a focus group, and development of cyberbullying simulations/scenarios using a controlled virtual environment). Adolescent reactions were examined and reported to fulfill two aims: (1) to raise awareness of cyberbullying, and (2) and to educate others about cyberbullying. The researchers' questions for this study are included in Table 1.

Method

Participants

All participants in this study were from one school system that serves approximately 10,000 students in a state in the southeastern region of the U.S. Based on data from the school system, approximately 63% of the total student population were eligible for free or reduced lunch. The participants will be described more specifically in each phase of this study.

Phase I: Cyberbullying Survey. Approximately 450 middle school students in Grades 7 and 8 (i.e., ages 13-14) were recruited from the five middle schools in the school system selected. The five middle schools ranged from low poverty schools to high poverty schools, based on data from the school system. Of the 450 participants recruited, 114 returned signed parental consent forms and assented to the survey. Of the 114 participants, 64 were females and 50 were males. There were 41 from the 7th grade and 73 from the 8th grade. The racial backgrounds included: 33 Caucasian students, 67 African American students, 3 Hispanic students, 2 Asian American students, and 9 students did not identify their racial background.

Phase II: Focus Groups. Approximately 20 middle school students in Grades 7 and 8 were recruited from two middle schools in the same school system. The two middle schools involved in the focus group were heterogeneous. School A was a high poverty school and School B was a low poverty school. Of the 20 students recruited at the two schools, 13 students assented to the focus group interviews (after written parental consent was given). From School A there were 7 students, including 4 males and 3 females. The racial backgrounds included: 1 Caucasian student, 5 African American students, and 1 Hispanic student. From School B there were 6 students, including 4 males and 2 females. The racial backgrounds included: 4 Caucasian students and 2 African American students.

Phase III: Development of Cyberbullying Scenarios. Data collected from both phase I and phase II informed our scripting for the cyberbullying scenarios/simulations. We also recruited 2 students from phase II to view the initial scenarios and to provide feedback before the final rendering of the scenarios. Details of this are given below in the Procedures section.

Instruments

Phase I: Cyberbullying Survey. The quantitative instrument used for the survey was an adapted version of Li's (2007) Cyberbullying Survey. Li granted permission for the authors to use and adapt the survey. The survey used in this study consisted of 8 demographic questions and 17 additional questions devoted to cyberbullying information (e.g., "I know someone who has been cyberbullied."; "When adults know about cyberbullying, they try to stop it..."). The survey had a mix of questions including open-ended, "yes/no," and multiple choice options. At the end of the survey, the students indicated whether or not they would like to continue as a participant with another aspect of this study (i.e., phase II or phase III).

Phase II: The Two Focus Groups. Focus groups at the two participating schools were formed from students who indicated interest in being a part of phase II or phase III of the study. The aim of the focus groups was to build upon the data collected from the Cyberbullying Survey (Li, 2007). The focus groups were used to gather additional information and feedback from the students to assist the authors in creating authentic cyberbullying scenarios for phase III. A focus group guide was written (and approved by the IRB prior to use) and followed to ensure that students from both schools had exposure to the same questions. Sample questions from the focus group guide included ("Share your ideas about cyberbullying and what does it look like?"; "What is the most common form of cyberbullying?").

Phase III: Student Observations of Cyberbullying Scenarios. The authors created cyberbullying scenarios/simulations that were derived from student feedback from phase I (Cyberbullying Survey) and phase II (focus groups). Based on the feedback and data collected, cyberbullying scenarios were created within *Second Life (SL)*. At the researchers' institution, at the time of the study, several college students were involved in developing a virtual university presence within *SL*. The researchers met with two *SL* student developers. During this meeting, the phase III scripts (derived from phases I and II) were provided to the developers and the researchers discussed the scenarios/simulations in depth. The discussions included how the scenarios were to be conceptualized, the visuals expected, and audio needed for the simulations.

Procedure

Prior to contact with the school system involved in this study, Internal Review Board (IRB) approval was granted by the institution in which the four researchers were employed. Once IRB permission was granted, the researchers contacted the school administrator in charge of research for the school district to seek school system-wide approval for the study. Once permission from the school system was granted, the researchers contacted principals at the five middle schools in the school district.

At the school level, the following procedures were carried out for consistency. Once principal permission was received, parental consent forms were delivered to each school. These forms were distributed to the students in Grades 7 and 8 in the selected classrooms. Returned consent forms were collected by the teachers and held in a confidential place for the researchers. On the administration day, the researchers collected the signed parental consent forms.

Due to the nature of our study, several safety features were in place. No identifiable information related to a student's name or school was used during any stage of our research.

Rules and guidelines specified by the IRB were followed. Throughout each phase of the research, from survey distribution to the *SL* scenario reviews, the middle school students were given opportunities to talk confidentially about cyberbullying. In such a case, if a student was upset or wanted to talk to an adult, research team members were instructed to refer students to their respective school counselor.

Phase I: Cyberbullying Survey. The research team sent informed consent forms to all potential participants in Grades 7 and 8 at the five middle schools. Once parental consent was granted, and student assent was attained, the researchers administered the Cyberbullying Survey. During the administration, if questions arose, they were answered. The survey took approximately 15 minutes to administer. At the end of the survey, students were asked if they were willing to be contacted again about phase II or phase III of the study. The surveys were collected and responses were entered into SPSS to further analyze the data.

Phase II: Focus Groups. The research team met with two focus groups (n=6 and n=7, respectively) and followed the focus group guidelines and protocol that had been IRB approved. The focus groups were held at the schools at a time approved by the principal and led by the research team members (two associate professors and two graduate students).

The aim was to have 5-10 students per group. For size of a focus group, the authors followed Morgan's (1988) recommendation (i.e., as few as three or four participants, but no more than 12). The researchers formed groups at two different schools to ensure a diverse group of participants. The focus groups were audiotaped and researchers followed IRB procedures fully. The audiotapes were available only to the researchers and graduate assistants involved in the research study. Pseudonyms were assigned to each focus group participant and these

pseudonyms are used later in our data presentation. The tapes were destroyed once the data were transcribed.

For phase II, the focus group discussions were audiotaped using a digital recorder; the files were later downloaded to a computer for ease of transcription, and then printed and analyzed using qualitative content analysis strategy of constant comparative approach (Lincoln & Guba, 1985). To generate results and to establish trustworthiness and credibility, four members of the research team repeatedly read and re-read (Lincoln & Guba) the transcripts to inductively discover the emergent themes, categories, and passages to establish codes and themes, synthesizing participants' responses as indicated by more than one participant (Corbin & Strauss, 2007). Each member of the team read through the transcriptions carefully, jotting down any thoughts and initial interpretations. Each member then re-read through the sessions again and viewed the data holistically, reading for overall themes, categories, trends and patterns. Team members also made notations of intensity of comments when present.

The four research team members then met and discussed their observations and interpretations of the two focus groups. There were several commonalities observed and noted among the research team members. The team summarized the commonalities, into themes, including: 1) Reactions, 2) Knowledge, and 3) Coping (see Results section for details).

Phase III: Student Observations of the Cyberbullying Scenarios. The scenarios/simulations were developed from the quantitative results of phase I and the qualitative results of phase II of this study. The platform choice was also designed with safety concerns for the adolescents. The scenarios/simulations were based on cyberbullying data identified by the students. A virtual world environment was used to examine cyberbullying because it was safe and controlled.

In phase III the cyberbullying scenarios/simulations that were built were fully “acted out” using avatars and virtual simulations (see Figure 1), and subsequently recorded using screen capturing technology. The recordings were played on a computer screen in a counseling laboratory to allow the researchers to review student reactions to the scenarios/simulations.

Following the first rendering of the scenarios, two middle school students who agreed to participate in this phase, viewed the scenarios/simulations in a counseling laboratory in the university setting. During this session, the researchers examined (1) student reactions to the scenarios/simulations, (2) nonverbal behaviors during the time they viewed the scenarios/simulations, and (3) their post-scenario responses. Following the students’ separate viewings of the scenarios, collectively the researchers and students reviewed and discussed the scenario, including: (1) misinterpretations, (2) lack of clarity, (3) setting (e.g., proximity of furniture and avatars), (4) length and audio volume of the scenarios, and (5) educational value of the scenarios.

The researchers were specifically focused on the following questions from Table 1 “What are the student reactions to the scenarios/simulations?”; “What were the nonverbal behaviors during the time participants were viewing the scenarios/simulations?”; “What did the students discuss in the post-scenario/simulation time?” These data were chosen to further ensure the development of scenarios for the purposes of raising awareness and education of cyberbullying prevention.

Results

Phase I Cyberbullying Survey

For phase I, the adapted version of Li’s (2007) Cyberbullying Surveys was administered to 114 middle school students. Descriptive statistics were used to examine the first three

questions in Table 1. The three questions, “What is the frequency of cyberbullying in the lives of middle school students?”; “Who is most likely to participate in cyberbullying?”; and “What are the number of experiences and the methods used for cyberbullying?”, will be addressed at this time.

Frequency and Participation in Cyberbullying. Overall, almost one-half of the students (45.6%) were aware of specific cyberbullying incidences occurring to someone they knew, while 29.8% of the respondents indicated that they had been cyberbullied. Additionally, 14.9% reported that they have participated in cyberbullying someone else. However, only 4.4% responded that their cyberbullying incident took place in school.

The gender of cyberbully victims and cyberbullies was also examined. It was found that 36% of males and 25% of females were victims of cyberbullying. Furthermore, 16% of males and 14.1% of females were cyberbullies.

Number of Experiences and Methods Used for Cyberbullying. When cyberbully victims and cyberbullies’ experiences were examined, it was found that cyberbullying experiences, regardless of being the bully or victim, tend to occur less than 4 times. Respondents were given three choices: “less than 4 times,” “4 to 10 times,” and “over 10 times.” Among the cyberbully victims, 75.8% were cyberbullied less than 4 times, while 82.3% of cyberbullies indicated participating in cyberbullying less than 4 times. Among cyberbully victims, 12.1% were cyberbullied 4 to 10 times, and 12.1% were cyberbullied over 10 times. Among cyberbullies, 11.8% reported cyberbullying 4 to 10 times and 5.9% cyberbullied over 10 times.

The researchers also examined the most popular methods for cyberbullying. Among both cyberbullies and victims, cyberbullying occurred most via MySpace. Almost 53% of victims indicated that it occurred through MySpace and 70.6% of cyberbullies indicated that they

cyberbullied through MySpace. Table 2 provides further detail about the methods of cyberbullying.

Phase II Focus Groups

Reactions. There were distinct differences between the two focus groups. To some extent, we believe some differences can be attributed to socioeconomic status (SES) (i.e., One school was determined to be low poverty by the school system, the other was determined to be high poverty). All the team members agreed that School A participants' reactions to some of the questions were more confrontational and aggressive in nature, while School B tended to be more passive in their reactions. For example, participants from School A used language, such as "Sometimes you have to fight" or "You have to be ready to fight," while School B used language such as ". . . it wasn't like really big or anything" or "You just over look it. . . "

Knowledge. School B was more computer savvy, evidenced by comments, such as, "...email the company, like Facebook or something," "Well on Facebook, there's something you can do called "Report and report this person," and "Like on some chat sites if you get, like you get a warning, and then you get banned for a certain amount of time, and like if you constantly break the rule, they'll ban you like permanently." These observations indicated that the knowledge and use of computer applications differed at the two schools, which might be attributed to SES factors of use and access to computer technology and frequency of use. For example, School B's participants indicated the technology most abused by cyberbullies was Facebook (which requires computer and online access), whereas with School A, the most frequently used technology was a cell phone.

Coping. The coping skills also differed between the two schools and the language used also indicated the differences. For example, when the focus groups were asked how they would

cope with a cyberbullying situation both schools indicated responses, such as “ignore it,” but participants at the low SES school A, added, “Get a bunch of people to get on that person,” “Get, like, 50 people and try to get them scared,” and “To confront them about it.” Comments from participants from School B included, “I’d go to my parents and like a school counselor” and “I think one of the worst things to do would be to like keep sending stuff back to them and making them even madder and keep going on and it’d be harder for them to forgive you.”

Students at both schools also indicated that they would turn to different individuals for help.

Participants from School A indicated that they would more likely seek help from friends. One participant described, “I handle it with friends, but that can be, like, even more of a mess.”

However, when students from School A were asked if they were to seek the help of an adult, the adult they typically chose was their school counselor. Participants from School B indicated that they would choose their mother or the school counselor.

While there were distinct differences identified by the research team members, there were also similarities. For example, both groups indicated that if they had been cyberbullied, they knew the identity of the cyberbully. It was also apparent through the team’s analyses of the focus group data that a clear definition of why cyberbullying occurred was due to “misunderstandings” or “mishearing stuff.” One issue that consistently came up with females in both groups was that gossip could lead to cyberbullying. Another issue that was prevalent between both groups was the need to educate adults on how to approach and educate others on cyberbullying.

Taking Focus Group Data Results to Build the Scenarios/Simulations

After the focus group data analyses, the research team triangulated data with the survey and determined the scenarios/simulations that they would develop. It was determined that one scenario needed to be behavioral in nature (i.e., girls sending hurtful messages via Facebook) and

another educational in nature (i.e., student visits the school counselor after a MySpace joke got out of hand. This scenario included an interactive educational component at the end to get students to think about cyberbullying in the post-scenario moments).

The students at both schools indicated a desire that adults should be better educated on “what cyberbullying is” and how to help students cope and “deal” with cyberbullying. The students, especially at school A, verbalized the need to “listen to the kids” and to better educate them on the causes of cyberbullying.

Phase III: Student Observations of the Scenarios and Future Plans

The scenarios were developed in *Second Life*, using virtual simulations to “act out” both scripts in the cyber-world. The scenarios were then recorded and played for the students on a large screen television in the counseling lab at the university. The students’ reactions (1 male, 1 female) were mixed, with the male student being more distracted by certain avatar movements. For example, he made the remark that the “guy’s hands should be less animated” also noting that the lips of the avatars did not always match what the avatars were saying. He also noted that the counselor’s office looked too academic, like a “university building” versus a “realistic” counselor’s office. The female participant did not seem as easily distracted by place and by avatar actions and commented that it seemed “realistic” because kids spend time playing interactive games.

While working in the virtual environment can create unique challenges in accurate and “realistic” renderings, both students were engaged while viewing the scenarios and when asked if this was a viable presentation medium, the female participant said yes and that it was “relatable.” She further noted that it was “best digitally” as it would be less likely to embarrass a student if a student had experienced the cyberbullying situation. Both students thought the length was

appropriate. The researchers observed that the scenario held the attention of both students. From the post-scenario discussions with the students, they affirmed that they heard the intended educational messages about cyberbullying.

Discussion

Cyberbullying has the potential to impact youth across systems (i.e., home, school, and the community). We agree with Li (2006) who stated that “the education dealing with cyberbullying related issues should be a joint endeavor of schools, families, communities, and the whole society” (p. 167). We believe this study sheds light on issues related to cyberbullying and can be used to educate others in the future. However, there are also limitations to this study. The study was undertaken in one school system in one county in the southeastern U.S. The study also focused specifically on middle school students’ experiences with cyberbullying. Thus, generalizability to other grades and to other school systems is unclear.

During phase I, we explored the frequency of cyberbullying in the lives of students and found that almost one-half of the population knew of specific cyberbullying events, which compares closely with Li (2006, 2007). We also examined the most likely participants in cyberbullying. This aspect of the study contrasted with numerous studies that have shown girls to be more likely to cyberbullying than boys (Beale & Hall, 2007; Kowalski & Limber, 2007; Li, 2007). In this particular study, girls and boys were almost even in their cyberbullying behaviors (14.1% females, 16.0%, respectively), which matched closely to Li’s (2006) results. As far as being victims of cyberbullying, this study found that boys were targeted more than girls.

The number of experiences and methods used for cyberbullying was also investigated. While this study found that cyberbullying tends to occur less than 4 times, the number of experiences varied (see Table 2). This finding was similar to Li (2006). As shown in Table 2,

MySpace and cell phones were the most popular technologies used to cyberbully, with virtual games and email also used frequently. While Li (2007) considered methods to cyberbully, our results differed. While Li reported approximately 9% used email, 36% used chatroom, and 55% used several sources, no study, to our knowledge, has pinpointed specific methods used for cyberbullying (e.g., MySpace, Facebook).

From our focus group data collected in phase II, we learned that all students defined cyberbullying and identified when and where it occurs similar to what other researchers (Beale & Hall, 2007; Kowalski & Limber, 2007; Li, 2007; Willard, 2008) have found. Email, social networking sites (i.e., MySpace, Facebook), and cell phones were identified as common devices to use or to engage in cyberbullying. The data indicated that both School A and School B participants had a general understanding of cyberbullying, although there were differences between the two groups in how the students dealt with the issue. For example, School A used language such as “You have to be ready to fight” while School B seemed more passive with language such as “You just overlook it.” We experienced similar observations in overall technology knowledge and how the students coped with cyberbullying when (or if) it occurs. For example, School B shared techniques on how to report or to block a cyberbully on Facebook. We suspect some of the differences may be attributed to a lack of computer and Internet connectivity at the lower SES school; therefore less time is spent using the multiple technologies associated with cyberbullying (i.e., online games, Facebook, chat rooms). This was further supported through the answers to our question of what technologies they most enjoyed using. The cell phone was overwhelmingly the technology of choice at School A, while online social networking sites and online gaming were prominent at School B. Such SES gaps present additional limitations in disseminating information about bullying through “electronic means”

(Li, p. 1780), reinforcing the need to create virtual scenarios which can be videotaped and presented through different venues, both online and offline.

In phase III of this study, the scenarios/simulations were developed using a virtual world environment to “allow students the freedom to project their thoughts and feelings related to trauma and bullying” (p. 180). In the case of School A, there was a general belief that “gossip” caused cyberbullying and students turned to friends first, and the school counselor second. We realized the need to educate students and others on cyberbullying prevention, based on comments and questions from the focus group participants.. Following initial development, student evaluators viewed the scenarios and offered feedback for additional refinement. The students did agree that the virtual presentations were realistic since kids often play interactive games. Further, when asked what they had learned, they agreed that the messages of the scenarios were clear: “Do not take cyberbullying into your own hands and tell an adult.”

The data from this study have helped us to redefine the importance of creating educational scenarios/simulations with school-aged issues of the day, such as cyberbullying. We hope that our data and recommendations can make pedagogical contributions for teacher educators as they prepare future teachers to recognize and prevent cyberbullying, as well as assist current K-12 teachers, administrators, and counselors. Scenarios, such as what was developed for this study, can help teachers in a classroom setting without a computer or connectivity. School counselors may also use such tools in classroom guidance, small group settings, or to assist in parent education.

Having educational tools that reach teachers, counselors in and outside of school settings, and parents is important. We want to clearly underline this finding since our data indicated that students turned to both school counselors and parents (i.e., most often, mom) when

cyberbullying occurred. Data collected throughout each distinct phase of this study have helped us explore the how, why, and when cyberbullying occurs, therefore, further informing us on what type of scenarios are needed to educate and to raise awareness of this issue, our study's overarching aims.

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Table 1

Research Questions for the Study

Phase I:

1. What is the frequency of cyberbullying in the lives of middle school students?
2. Who is most likely to participate in cyberbullying?
3. What are the number of experiences and the methods used for cyberbullying?

Phase II:

4. What commonalties were observed between the two focus groups?
5. What themes emerged from the two focus groups?
6. How were the focus groups different?

Phase III/Future Study

7. What are the student reactions to the scenarios/simulations?
8. What were the nonverbal behaviors during the time participants were viewing the scenarios/simulations?
9. What did the students discuss in the post-scenario/simulation time?
10. What information was written down by the participants during the process?
- *11. Are virtual environments viewed as safer places to bully others?
- *12. What happens when environments are built and devoted to cyberbullying?
- *13. Are students familiar with safety strategies related to cyberbullying? If so, what strategies do they use?
- *14. How do students believe cyberbullying can be prevented?

*Note: Questions 11-14 will be addressed in subsequent studies.

Table 2

Percentage of Students Who Experienced Cyberbullying through Various Methods

	Email	Facebook	MySpace	Cell Phone	Online Video	Chat Rooms	Virtual Games	Other
Victim	35.3%	11.8%	52.9%	50%	14.7%	11.8%	35.3%	8.8%
Bully	17.6%	0%	70.6%	47.1%	11.8%	5.9%	23.5%	5.9%

Figure 1. Mark Visits the Counselor